

Lessons From Recent



Conflicts: Tactical Threats to Armor

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Briefer: Ed Wagamon

Classification: Unclassified



Why Russia?

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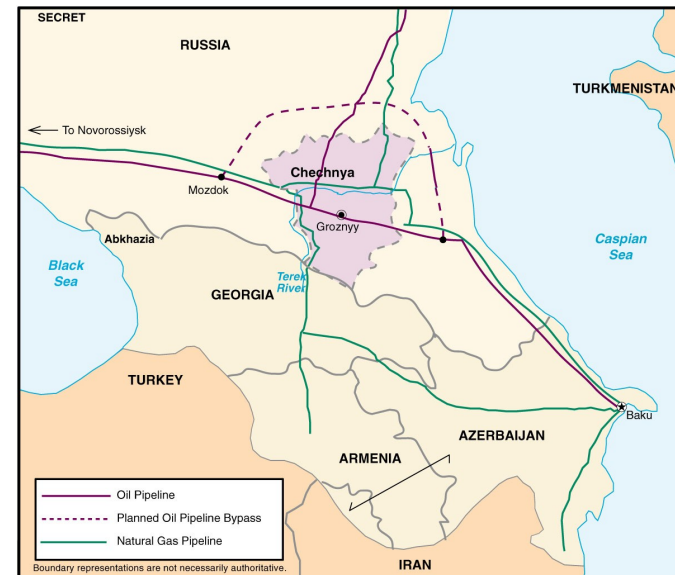
- Recent combat experience similar to expected US encounters
 - Highlights asymmetric threat
 - Demonstrates advantages & disadvantages of a modern conventional force vs. well-armed insurgents
- Russia retains a state of the art doctrinal development process
 - Able to adapt doctrine, operational art, TTP to changing threat environment and new technologies
 - Russia's warfighting TTP proliferate
 - Arms sales and advisors
 - Military to military exchanges
 - Journals, books, and conferences

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Chechnya: Strategic Importance - And Hard To Get To

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The Chechens



(This should sound familiar....) NSCOM

- Well-armed Muslim extremists
- “Warrior/Bandit” traditions
- Foreign Mujahideen & mercs
- Usama Bin Ladin connections
- Poor infrastructure
- Complex terrain
- More popular support than n
- Ethnic, clan-based society
- Blood feuds, revenge killings
- Organized crime, anarchy



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Suburban Grozny: Wide



Avenues, 10-12 Story Buildings



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Chechen Rebel Defenses, Methods

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'94-96

- **Elevated/sunken firing positions**
- **Tanks, arty, ATGMs, mortars**
- **Rebels “hugged” Russian units**
- **Effective use of RPGs, mines, and snipers**
- **Decentralized, ad hoc direction of small rebel groups**

'99-00

- **All the above, except no rebel armor inside Grozny and few heavy weapons; ammo, food stockpiled**
- **Bricked up & mined, booby trapped first floors**
- **Extensive fortification of selected areas:**
 - **Minutka Square, Cannery, Staraya Sunzha, others.**
 - **Foreign mujahideen assist fortification design**
 - **Tunnels, nuclear shelters, “pyramid bunkers” under buildings**

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Chechen Rebel Antiarmor Methods

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- “Classic” column ambushes:
 - *Radio control mines, bombs in road, off-route mines*
 - *Small arms drives infantry into carriers, buildings*
 - *RPG volleys from high buildings, basements, treelines*
 - *Light AFVs riddled by 12.7mm mg, 23mm AA guns*
 - *Hit the head & tail to trap & destroy middle*
 - *Mortar barrage seals off escape, rescue attempts*
- “Bait and Shoot”, pre-teen RPG gunners
- Mines laid amid debris, even by children
- Expertly flown ATGMs, even in city’s confines
- Molotovs, fougasse, & expedient flame weapons
- Snipers vs. TC’s, vision blocks, sights

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Mines & Explosives vs. Armor

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- “Stacked” antitank mines (e.g., 3 x TM-46 together)
- Improvised off-route mines (“RPG on a string”)
- Radio controlled mines, explosives
- Artillery shells fuzed for detonation
- Car bombs
- Buried 500 lb aerial bombs
- Directional mines (including very large)
- Industrial & homemade explosives
- “Pet Rocks” (Radio controlled roadside explosives disguised as rocks!)



Tanks and “heavy” AFV crews can usually survive most of these attacks, even if the vehicle is wrecked.

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Mine vs. Light AFVs, Trucks

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- Airborne troops prefer wheeled BTR to tiny BMD
 - Mines blow tracks through BMD's thin belly
 - BTR-80 wheels can provide standoff
 - One BTR-80 took 2 mine strikes, continued to move
- Russians experience in soft-skinned vehicles
 - Cab over motor - driver dies
 - Motor forward gives needed standoff - "2 meters of

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FRONT SIDE VIEW OF A BTR-80 WHEELED APC.
Russia

NIMA Photo 2047500

20 September 1996



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Chechen Rebels in Rough Terrain

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Old and New “Flames”



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- **RPO-A “Thermobaric” rocket**
 - No Western counterpart - a small FAE
 - 2-kg warhead "equivalent to" a 122-mm howitzer round
 - Effects 80 m³ in a confined space
 - Devastates buildings, bunkers, trenches
 - Pk 80% vs. light AFV's
 - Crushing injuries, burns = medics not ready
- OT-55 flamethrower tanks from storage
- TOS-1 “Heavy Flamethrower”
- 220mm FAE for “Uragan” MRL
- 122mm Thermobaric rockets



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T-72B Tanks at Grozny

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Tank Lessons Learned

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- **Infantry cover for tanks essential,** especially in close/complex terrain
- **Tanks essential for urban combat**
 - Destroy firing points, fortifications
 - Blow “mouseholes”
 - Mobile armored shields” for infantry
 - Gas Turbines a liability in urban combat
 - Belly escape hatch saves lives
 - Buttoned up “simultaneous engagement” required
 - Aggressive tactics keep insurgents off balance



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Assault Group (Variant)

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(Note generous allotment of armored vehicles)

FIRE SUPPORT GROUP



Tank Platoon



Flame-throwers



IFV Platoon



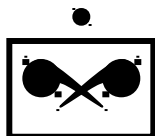
Auto-Grenade Launchers



Mortars



FO / FAC



Smoke / CS

SEIZURE GROUP



MR Platoon



IFV Platoon

RESERVE



MR Platoon



Tank Platoon

CONSOLIDATION GROUP



MR Platoon

ENGINEER GROUP



(Supporting direct and indirect fire assets not shown)

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“Mobile Armored Shields”

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3-D, 24-hour Urban Battlefield

“Black Hole Effect” INSCOM

Manpower resources perpetually strained:

- ***Reserves must be always “ready”***
- ***Troops must be rotated to rest, replenish often***
- ***Large troop fraction to flank, rear security***
- ***WIA, KIA, accidents, psych casualties deplete units***

Brigade “pushes” 1 or 2 battalions, others reserve, rest:

Battalion “pushes” w/ one company, others security, reserve, rest

Company: one platoon “point”, one “security”, one “reserve”

Platoon: one squad “point”, one “support”, one “security”

(And leaders get very little rest, even when “off duty”)

Thus: 2-3 snipers can stall a whole brigade for hours

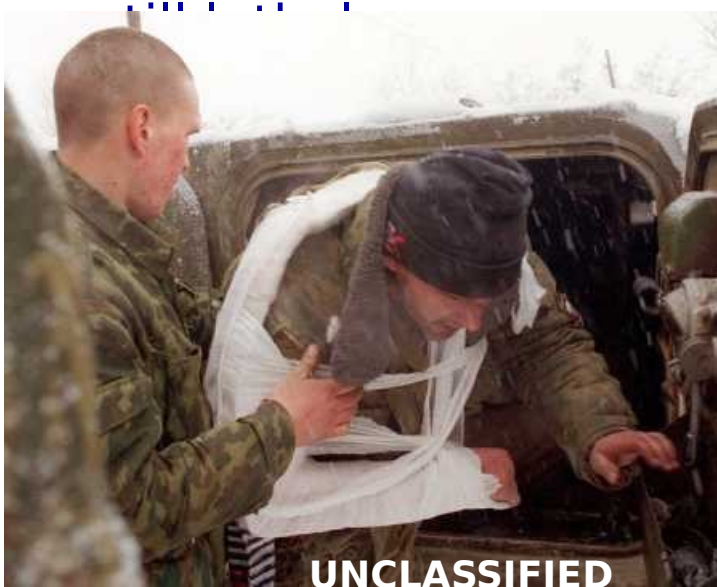
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Snipers: Single Greatest Threat

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- Some VSS rifles captured from SPETsNAZ
- Usually not “sniper-trained” to start with
- Some (female mercenary) snipers used .22 cal. rifles
 - Legendary “White Tights” paid well, but tales exaggerated
 - No muzzle flash, blast, dust, soft lead .22LR bullet



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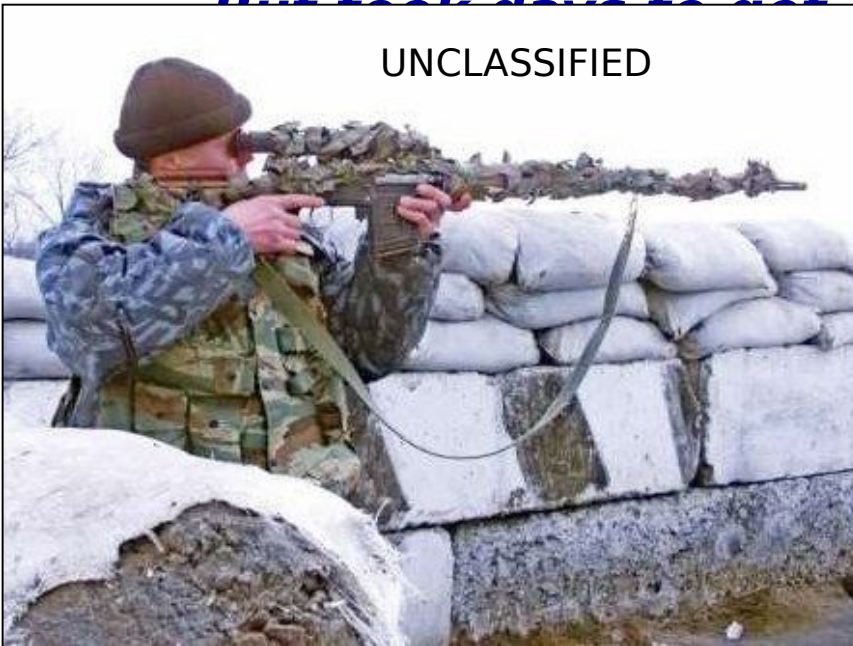


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Sniper/ Counter-Sniper Ops INSCOM

- Initially, tanks, IFVs, arty to destroy sniper nests
- SPETsNAZ counter-snipers also used VSS rifles
- Russian counter-sniper teams were effective:



VSS Silent, Flashless Sniper Rifle



Light Armor Lessons

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Light AFVs are highly useful for:

- High-angle fire vs. close-in, tall buildings
- Carrying infantry's assault supplies, ammo, gear:
 - ***Large ammo supply on APC can be crucial in a firefight***
 - ***Rebels must travel on foot, with only what they can carry***
 - ***Rebels habitually run short of ammo quickly***
- Crossing sniper/mortar-swept ground; MEDEVACs
- Light AFVs not survivable in
- C2 vehicles easy to pick out & destroy
- Troops ride on top (due to mine threat)

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Front-line MEDEVAC in Chechnya

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Light AFVs, Soft Vehicles Are Targets of Choice *INSCOM*



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BMP-2 Destroyed in Chechnya

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Russian Armor Losses '99-'00

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- 208 AFV'S lost, in total by 1 June 2000
- Lower losses than for '94-'96 war
- Includes:
 - 10 Tanks (T-72, T-62, possibly T-80)
 - ~150 BMPs (BMP-1, -2, and variants)
 - ~50 BTRs (BTR-70, -80, probably MTLB, + variants)

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House-to-House, Cordon and Search



(Can Robots Do This Yet?) ^{INSCOM}



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Russian AFV Protection Innovations

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Crew innovations saved lives:

- --"Bar Armor" vs. RPGs (not '99?)
- --Blast overpressure relief device
- --Sand-filled fuel cells
- --Sandbagged floors, troop shields
- --Extra skirts, appliques
- Troops ride on top of light AFVs, due to mines



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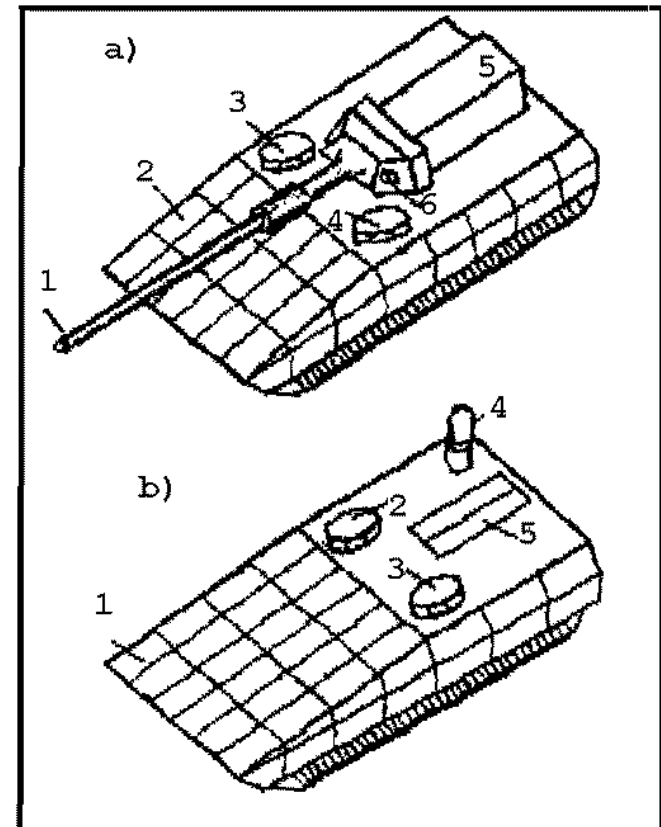




Visions of the future force

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- 2000-2005 Emphasis on R&D
 - Move toward more integrated reconnaissance and fire
- Continued emphasis on heavy, effective combined arms
 - Tank/anti-tank assets could take role
 - Block-module concept
 - Common weapons?
 - Novel use of platforms?
- Extensive knowledge of the US threat – while in R&D
- Continued surprises nearly every arms show



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BMPT Fire Support Vehicle

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BMPT Fire Support Vehicle

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TOS-1 Heavy Flamethrower

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NBC Threats

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- **Many nations acquiring WMD**
- **“Improvised” Chem / Bio weapons:**
 - **Medical radioactives**
 - **Medical wastes**
 - **Fuel biocontaminants**
 - **Corpses, diseases**
 - **Industrial chemicals**



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The Most Dangerous Threats to Future US Armor: *INSCOM*

- **Mental Category IV Crewmen:**

Q: "Didn't I tell you check the oil level before we moved out?!?"

A: "Yessir, I tried, but there wasn't any on the dipstick."

- *(Conversation with soon-to-be Private E-1 Ruffin, A Co, 1-73rd Tank Bn)*

- **GAO Staffers:** *("We're just here to help...")*

- **Congress:** *("Well, it's not made in my district...")*

- **Those pesky little Laws of Physics...**

- **The USAF** *(Mainly, the F-22 Fighter Program Office)*

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